ABSTRACT OF DISCLOSURE

A transfer power supply apparatus of an image forming machine which can maintain a predetermined degree of the quality of an image on a print medium even when the temperature of the surrounding environment varies. The image forming machine includes a voltage computation unit computing an appropriate voltage corresponding to resistance of the intermediate transfer medium, an output voltage generator generating a transfer voltage according to a signal output from the voltage computation unit, and a switching unit selectively applying a voltage output from the output voltage generator, wherein the switching unit connects a voltage output from the output voltage generator to the transfer roller when the image created on the intermediate transfer medium is transferred to the print medium, and connects a voltage output from the output voltage generator to the transfer backup roller when the image is not transferred to the print medium.